Stream Channel Classification (Level II) ....

Stream NAME: _____

Basin NAME: _____ Drainage AREA: _____Ac. _____SqMi.

Location: _____

Twp:_____ Rge:_____ Sec:_____ Qtr:_____ Lat._____Long._____

Observers:_____ Date:

Bankfull WIDTH (W_{bkf})_____Ft.
Width of the stream channel at the bankfull stage elevation.

Mean DEPTH (D_{bkf})_____Ft.
Mean depth of the stream channel cross-section at the bankfull stage elevation.

Width / Depth RATIO (W / D)_____
Bankfull width divided by bankfull mean depth.

Maximum DEPTH (D_{mbkf}) _____ Ft.
Maximum depth of the bankfull channel cross-section, or distance between the bankfull stage and thalweg elevations.

Flood-Prone Area WIDTH (W_{fpa}) _____ Ft.
Twice maximum depth, or (2 x D_{mbkf}) = the stage/elevation at which flood-prone area width is determined.

Entrenchment Ratio (ER) _____
The ratio of flood-prone area width divided by bankfull channel width: W_{fpa} / W_{bkf})

Channel Materials *(Particle Size Index)* **D50** _____mm.
The D50 particle size index represents the mean diameter of channel materials, as sampled from the channel surface, between the bankfull stage and thalweg elevations

Water Surface SLOPE (S) _____ Ft./Ft.
Channel Slope = "rise" over "run" for a reach approximately 20 - 30 bankfull channel widths in length, with the "riffle to riffle" water surface slope representing the gradient at bankfull stage.

Channel SINUOSITY (S_C) _____
Sinuosity is an index of channel pattern, determined from a ratio of stream length divided by valley length (SL/ VL); or estimated from a ratio of valley slope divided by channel slope (VS/S)

Stream Type

For reference, note:
p184, StreamType Chart
p185, Classification Key

... and REFERENCE REACH Summary Data

Channel DIMENSION

Pool Depth (dp) Ft.	Pool Width (Wp) Ft.	Pool(xs)Area: (Ap) SqFt.
Riffle Depth (dr) Ft.	Riffle Width (Wr) Ft.	Riffle(xs)Area: (Ar) SqFt.

Ratio: POOL Depth / RIFFLE Depth: (dp / dr)

Ratio: POOL Width / RIFFLE Width: (Wp / Wr)

Ratio: POOL Area / RIFFLE Area: (Ap / Ar)

Ratio: Max. Pool Depth / Mean Bankfull Depth (d_{bkf}): (dp_{max} / d_{bkf})

Ratio: Lowest Bank Height / Max. Bankfull Depth (d_{mbkf}): (BH_{low} / d_{mbkf})

Streamflow: Estimated Mean Velocity (u) @ Bankfull Stage Ft./Sec.

Streamflow: Estimated Discharge (Q) @ Bankfull Stage CFS

Channel PATTERN

Meander Length (L_M) Ft.	Radius of Curvature (R_C) Ft.
Belt Width (W_{BLT}) Ft.	Meander Width RATIO(MWR = W_{BLT} / W_{BKF}):

RATIO: Radius of Curvature / Bankfull Width (R_C / W_{BKF})

RATIO: Meander Length / Bankfull Width (L_M / W_{BKF})

Channel PROFILE

Valley Slope Ft./Ft.	Ave. Water Surface Slope Ft./Ft.
Riffle Slope Ft./Ft.	Pool Slope Ft./Ft.
Pool to Pool Spacing Ft.	Pool Length Ft./Ft.

RATIO: Riffle Slope / Average Water Surface Slope

RATIO: Pool Slope / Average Water Surface Slope

RATIO: Run Slope / Average Water Surface Slope

RATIO: Glide Slope / Average Water Surface Slope

RATIO: Run Depth / Mean Depth-Bankfull

RATIO: Glide Depth / Mean Depth - Bankfull

RATIO: Pool Length / Bankfull Width

RATIO: Pool to Pool Spacing / Bankfull Width

Channel MATERIALS

% Sand & <	D16 mm
% Gravel	D35 mm
% Cobble	D50 mm
% Boulder	D84 mm
% Bedrock	D95 mm

TABLE 5-3. Reference reach field data form for stream classification.

REFERENCE REACH FIELD FORM
STREAM CHANNEL CLASSIFICATION **LEVEL II**

STREAM TYPE: _____

STREAM NAME: _____ DRAINAGE AREA: _____ BASIN NAME: _____

OBSERVERS: _____ DATE: _____

LOCATION: _____ Twp._____ Rge._____ Sec. _____ Qtr. _____

Bankfull WIDTH _____Ft. (W_{bkf}) Bankfull MAX> DEPTH _____Ft. (d_{max}) Channel SLOPE_____Ft/Ft _____%

Bankfull Mean DEPTH _____Ft. (d_{bkf}) Flood Prone Area WIDTH _____Ft. (W_{FP}) Valley SLOPE_____Ft/Ft _____%

WIDTH/DEPTH Ratio _____ ENTRENCHMENT Ratio _____ SINUOSITY (Stream Dist/Valley Dist.) _____

Channel MATERIALS: (Pebble Count) D15_____mm D34_____mm D50_____mm D84_____mm D95_____mm

photo	*photo*